



Modified PTO/SB/33 (10-05)

#518
JPLW**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Docket Number

Q82625

Mail Stop AF
Commissioner for Patents
P.O. Box 1450 Alexandria, VA 22313-1450

Application Number

10/502,014

Filed

July 20, 2004

First Named Inventor

Tsukasa AGA

Art Unit

1713

Examiner

William K. Cheung

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal

The review is requested for the reasons(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

☒ I am an attorney or agent of record.

Registration number 33,276

Signature

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March 20, 2006

Date



PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q82625

Tsukasa AGA

Appln. No.: 10/502,014

Group Art Unit: 1713

Confirmation No.: 8458

Examiner: William K. Cheung

Filed: July 20, 2004

For: AQUEOUS WATER-AND OIL-REPELLENT DISPERSION

PRE-APPEAL BRIEF REQUEST FOR REVIEW

MAIL STOP AF - PATENTS

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

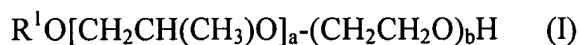
Pursuant to the new Pre-Appeal Brief Conference Pilot Program, and further to the Examiner's Final Office Action dated October 21, 2005, Applicant files this Pre-Appeal Brief Request for Review. This Request is also accompanied by the filing of a Notice of Appeal, an Amendment under 37 C.F.R. § 1.116, and a Petition and payment for an Extension of Time.

Applicant turns now to the rejection at issue.

Claims 1-10 stand rejected under 35 U.S.C. § 102(e) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. Patent 6,610,775 to Oharu et al. The Examiner considered Oharu et al as disclosing an aqueous water-and oil-repellant dispersion substantially as claimed, including a compound of Formula 5 having the structure shown at col. 9, lines 50-52 said to overlap in scope with the claimed nonionic surfactant represented by

formula (I) when R¹⁰ represents an alkpolyenyl group having a carbon number of 8 or more. Particularly, the Examiner considered that R¹⁰ would *inherently* have three or more side chains as required by R¹ of present claim 1.

The claims on appeal are directed to an aqueous water- and oil-repellent dispersion comprising: a homopolymer or copolymer (A); and a surfactant (B) which comprises a cationic surfactant and a nonionic surfactant of the Formula (I):



A characteristic feature of the invention is that R¹ of Formula (I) is a branched alkyl or alkenyl group including a main chain having at least 5 carbon atoms and three or more side chains having a total of at least three carbon atoms in all side chains.

The alkyl group, the alkenyl group or the alkpolyenyl group in the surfactant (b¹) of Oharu et al. preferably has a carbon number of from 4 to 26 and may be of a linear or branched structure (col. 9, lines 22-26). This corresponds to R¹⁰ of formula F5 of Oharu et al.

The "alkyl" group mentioned by Oharu et al. is a saturated hydrocarbon. The "alkenyl" group is a hydrocarbon group having an unsaturated bond. The "alkpolyenyl" group is a hydrocarbon having a plurality of unsaturated bonds.

Appellant previously submitted database material (four (4) pages) together with the Amendment under 37 C.F.R. § 1.116 filed February 21, 2006 showing various compounds having an "alkpolyenyl" group including a plurality of unsaturated bonds characteristic of such group.

The number of unsaturated bonds in an alkpolyenyl group has nothing to do with the number of side chains, and therefore there is no basis for the Examiner's assertion that an "alkpolyenyl group" would *inherently* have three or more side chains. That is, the mere expression "alkpolyenyl group" does not describe a branched alkenyl group of formula (I) of present claim 1 having three or more side chains having a total of at least three carbon atoms in all side chains.

Moreover, there is nothing in the cited prior art which suggests the desirability, and hence the unobviousness, of employing a surfactant (B) of present claim 1 having the specifically claimed structure.

In the Advisory Action dated March 6, 2006, the Examiner maintained that the "alkpolyenyl" group represented by R^{10} of Formula 5 of Oharu et al. is a polymeric group formed by polymerization of unsaturated hydrocarbons where the unsaturation is consumed by the polymerization process. Particularly, the Examiner maintained his position as to the meaning of "alkpolyenyl" because "such definition is not found in the original specification". By "original specification" Appellant understands that the Examiner is referring to Oharu et al.'s specification. However, Appellant has submitted objective evidence as to the meaning of "alkpolyenyl", and the Examiner has failed to address the database material submitted together with the Amendment filed February 21, 2006 which clearly shows that "alkpolyenyl group" is a hydrocarbon group having a plurality of unsaturated bonds.

The main issue at hand is whether the "alkpolyenyl group" represented by R^{10} of Formula 5 of Oharu et al. describes a branched alkenyl group of Formula (I) of present claim 1 having

three or more side chains. Even if the Examiner were correct in stating that "alkpolyenyl" is a polymeric group formed by polymerization of unsaturated hydrocarbons, such definition would not lead to the surfactant (B) of present claim 1 having the specifically claimed structure (i.e., where R^1 has three or more side chains having a total of at least three carbon atoms in all side chains).

In the Advisory Action, the Examiner also did not comment on the results of comparative testing presented in the specification, and discussed in detail in the Remarks portion of the Amendment under 37 C.F.R. § 1.116 filed February 21, 2006, showing that surfactant (B) comprising a cationic surfactant and a nonionic surfactant of Formula (I) where R^1 has three or more side chains, provides remarkably enhanced properties as compared to Comparative Examples employing a nonionic surfactant having no side chains.

Appellant respectfully requests the Pre-Appeal Brief Conference Panel to withdraw the foregoing rejection in view of clear error. The "alkpolyenyl group" represented by R^{10} of Formula 5 of Oharu et al. does not describe a branched alkenyl group of Formula (I) of present claim 1 having three or more side chains. Moreover, there is nothing in the cited prior art which suggests the desirability of modifying the compound of Formula 5 of Oharu et al. to have the specifically claimed structure.

Accordingly, it is respectfully submitted that the claims on appeal are neither anticipated nor obvious over Oharu et al., and Appellant respectfully requests withdrawal of the foregoing rejection.

Respectfully submitted,



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